

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for simulating the effect of an exploding projectile fired by a weapon in a simulated impact area that would be affected by the exploding projectile, the method comprising:

emitting a weapon signal from the weapon toward a target area, wherein the weapon signal defines a first portion of the simulated impact area less than the entire simulated impact area;

detecting the weapon signal by a sensor located near the target area;

transmitting an impact signal when the weapon signal is sensed by the sensor and causing the transmitted impact signal to cover define the first portion of the simulated impact area and a second portion of the simulated impact area which is at least partially outward of the first portion ~~including a first portion of the impact area which is covered by the weapon signal from the weapon and a second portion of the impact area which is not covered by the weapon signal of the weapon and which is also part of the simulated impact area of a simulated detonation of a projectile that would be fired by the weapon to the simulated impact area.~~

2. (previously presented) The method of claim 1, further comprising
determining the trajectory of a simulated projectile fired by the weapon based on the angle of incidence of the weapon signal on the sensor;

modifying the impact signal directionally for approximating the area covered by the impact signal to simulate the impact area of detonation of a real projectile near the target area.

3. (currently amended) A device for simulating the effect of an exploding projectile ~~projectiles~~ fired by a weapon toward a target area, wherein the weapon comprises:

~~the weapon comprising~~ a weapon signal emitter emitting device to emit a weapon signal, wherein the weapon fires in a simulated impact area that would be affected by the exploding

projectile, and wherein the weapon signal defines a first portion of the simulated impact area less than the entire simulated impact area;

the device comprising:

a sensor ~~for being~~ located near the target area and adapted for sensing the weapon signal from the weapon;

a transmitter operatively linked to the sensor such that the weapon signal ~~detected~~ sensed by the sensor and indicating the simulated firing of a projectile with an explosive effect in the target area operates the transmitter to emit an impact signal that defines the first portion of the simulated impact area and a second portion of over the simulated impact area which is at least partially outward of the first portion of the simulated projectile.

4. (currently amended) The device of claim 3,

wherein the sensor is directionally sensitive and adapted to sense the direction from which the weapon signal is received;

the transmitter ~~connected with~~ linked to the sensor is operable to emit the impact signal with a directionally variable range, ~~so that~~ wherein the transmitter is adapted for being triggered by the sensor according to ~~the~~ an angle of incidence of the weapon signal of the weapon in such a manner that the area supplied with an effective impact signal by the transmitter approximates the impact ~~there of~~ area an exploding projectile.

5. (currently amended) The device of claim 4, A device for simulating the effect of exploding projectiles fired by a weapon toward a target area, the device comprising;

~~—— a sensor for being located near the target area and adapted for sensing the weapon signal from the weapon;~~

~~—— a transmitter operatively linked to the sensor such that the weapon signal detected by the sensor and indicating the simulated firing of a projectile with an explosive effect in the target area operates the transmitter to emit an impact signal over the impact area of the simulated projectile;~~

~~—— wherein the sensor is directionally sensitive and adapted to sense the direction from which the weapon signal is received, and wherein the transmitter connected with the sensor is~~

~~operable to emit the impact signal with a directionally variable range so that the transmitter is adapted for being triggered by the sensor according to the angle of incidence of the weapon signal of the weapon in such a manner that the area supplied with an effective impact signal by the transmitter approximates the impact there of an exploding projectile, and~~

wherein the sensor is operable to sense senses the weapon signal over a total angular range, the sensor comprises a plurality of sensor elements, each sensor element covering a sector of the total angular range covered by the sensor for enabling the sensor to determine the angle of incidence of the weapon signal emitted by the weapon dependent upon the sensor elements on which the weapon signal is incident.

6. (currently amended) ~~The device of claim 5,~~ A device for simulating the effect of exploding projectiles fired by a weapon toward a target area, the device comprising;

a sensor located near the target area and adapted for sensing the weapon signal from the weapon;

a transmitter operatively linked to the sensor such that the weapon signal indicating the simulated firing of a projectile with an explosive effect in the target area is sensed by the sensor which operates the transmitter to emit an impact signal over a simulated impact area of the simulated projectile;

wherein the sensor is directionally sensitive and adapted to sense the direction from which the weapon signal is received, and the transmitter is linked to the sensor is operable to emit the impact signal with a directionally variable range wherein the transmitter is adapted for being triggered by the sensor according to an angle of incidence of the weapon signal of the weapon in such a manner that the area supplied with an effective impact signal by the transmitter approximates the simulated impact area of an exploding projectile, and

the sensor is operable to sense the weapon signal over a total angular range, the sensor comprises a plurality of sensor elements, each sensor element covering a sector of the total angular range covered by the sensor for enabling the sensor to determine the angle of incidence of the weapon signal emitted by the weapon dependent upon the sensor elements on which the weapon signal is incident, and further

wherein the transmitter comprises a plurality of transmitter elements, each transmitter element being adapted to supply approximately a respective sector having a controllable range over a respective part of the simulated impact area and each of the transmitter elements being connected with at least one of the plurality of sensor elements each for a particular sector so that each transmitter element is triggered by the at least one sensor element according to the angle of incidence of the weapon signal.

7. (currently amended) The device of claim 5, wherein the transmitter comprises a plurality of transmitter elements, each transmitter element being adapted to supply approximately a respective sector having a controllable range over a respective part of the simulated impact area and to adjust the range of the impact signal in the corresponding direction, the transmitter elements being operatively connected with the sensor, so that each transmitter element is triggered by the sensor according to the angle of incidence of the weapon signal.

8. (previously presented) The device of claim 3, further comprising a reflector for reflecting at least an effective portion of the weapon signal back to the weapon.

9. (previously presented) The device of claim 8, wherein the reflector and the weapon are positioned so that the signal from the weapon is reflected by the reflector back to the weapon, and the weapon emits a weapon signal to be transmitted to the sensor by firing of the weapon.

10. (currently amended) The device of claim 3, further comprising a weapon spaced from the sensor operable to emit a the weapon signal toward the sensor.

11. (currently amended) The device of claim 10, wherein the sensor is responsive to laser light and the weapon includes a device for emitting the weapon signal in the form of laser light toward the sensor.

12. (original) The device of claim 3, wherein the sensor is responsive to laser light.

13. (original) The device of claim 3, wherein the transmitter comprises at least one laser light source and the laser light source of the transmitter emits an impact signal in the form of laser light.

14. (currently amended) A device for simulating the effect of exploding projectiles fired by a weapon toward a target area, the device comprising;

a sensor ~~for being~~ located near the target area and adapted for sensing ~~the~~ a weapon signal from the weapon;

a transmitter operatively linked to the sensor such that the weapon signal indicating the simulated firing of a projectile with an explosive effect in the target area ~~detected~~ sensed by the sensor which ~~and indicating the simulated firing of a projectile with an explosive effect in the target area~~ operates the transmitter to emit an impact signal over ~~the~~ a simulated impact area of the simulated projectile; and

screens at the transmitter separating the transmitter into transmitter elements for providing an essentially sectorial restriction of the impact signal emitted by the transmitter elements, wherein the sensor is directionally sensitive and adapted to sense the direction from which the weapon signal is received and wherein the transmitter connected with the sensor is operable to emit the impact signal with a directionally variable range, so that the transmitter is adapted for being triggered by the sensor according to the angle of incidence of the weapon signal of the weapon in such a manner that the area supplied with an effective impact signal by the transmitter approximates the impact there of an exploding projectile, wherein the sensor senses the weapon signal over a total angular range, the sensor comprises a plurality of sensor elements, each sensor element covering a sector of the total angular range covered by the sensor for enabling the sensor to determine the angle of incidence of the weapon signal emitted by the weapon dependent upon the sensor elements on which the weapon signal is incident, and wherein the transmitter comprises a plurality of transmitter elements, each transmitter element being adapted to supply approximately a respective sector having a controllable range over a respective part of the impact area and each of the transmitter elements being connected with at least one of

the plurality of sensor elements each for a particular sector so that each transmitter element is triggered by the at least one sensor element according to the angle of incidence of the weapon signal.

15. (original) The device of claim 14, wherein the screens of the transmitter comprise separating walls between the transmitter elements.

16. (original) The device of claim 15, wherein the screens between the transmitter elements are adjustable in the function of angle of incidence of the weapon signal received on the sensor for allowing adaptation of the area covered by the impact signal of each of transmitter elements to the impact area of an exploding projectile.

17. (original) The device of claim 3, wherein the sensor is sensitive to high frequency radio signals or ultrasonic signals.

18. (original) The device of claim 17, wherein the transmitter is adapted to emit an impact signal in the form of a high frequency radio signal or an ultrasonic signal.

19. (original) The device of claim 3, wherein the transmitter is adapted to emit an impact signal in the form of a high frequency radio signal or an ultrasonic signal.

20. (previously presented) An installation for simulating combat action comprising at least one obstacle in the line of sight of an entire impact area of a projectile, the obstacle having a periphery;

a device for simulating the effect of exploding projectiles fired by the weapon toward a target area, the device comprising:

a sensor being located near the target area and adapted for sensing a weapon signal from the weapon;

a transmitter operatively linked to the sensor such that the weapon signal detected by the sensor and indicating the simulated firing of a projectile with an explosive effect in the

target area operates the transmitter to emit an impact signal over the impact area of the simulated projectile;

said device being located at the periphery of the obstacle positioned for allowing simulation of the effect of a weapon fired projectile exploding at the target location near the device.